

JOANEN, T. & MCNEASE, L. (1975): Notes on the reproductive biology and captive propagation of the American alligator. *Proc. 29th Annual Meeting Southeast Association of Game and Fish Commissioners*. 29: 407-415.

McILHENNY, E. A. (1934): Notes on incubation and growth of alligators. *Copeia* 1934: 80-88.

NICHOLS, J. D. & CHABRECK, R. H. (1980): On the variability of alligator sex ratios. *American Naturalist* 116 (1): 125-137.

SINGH, L. A. K. (1979): Sexual attraction of a

wild mugger (*Crocodylus palustris*, Lesson) toward captive mugger. *J. Bombay nat. Hist. Soc.* 76 (1): 167-172.

WHITWORTH, J. (1971): Notes on the growth and mating of American alligator (*Alligator mississippiensis*). *International Zoo Yearbook* 11: 144.

YANGPRAPAKORN, U. (1971): Captive breeding of crocodiles in Thailand. 98-103 In: Proceeding of the First Working Meeting of crocodiles Specialists IUCN Publications New Series No. 32 Morges, Switzerland.

16. GHARIAL ATTACKS ON MAN

Malcolm Smith (1931) stated of the gharial, "Very occasionally they will attack man, but they are not much feared on this account."

In over 6 years' experience, we know personally of only one attack on man by a gharial. The details of this attack are set out below together with information on three other 'attacks' which we have been told about during survey trips.

On 14th November 1979 at Tasera on the Mahanadi river in the Satkoshia Gorge Sanctuary of Orissa, an old man, Sankara Behera, aged 55 years, had his left arm caught by a young male gharial, 3-3.7 m in length, while Sankara was washing his utensils in the water from the river bank. The gharial, probably waiting to emerge at this preferred basking spot, was not observed by Sankara as the water was turbid due to waves washing the bank. The old man was either pulled or slipped into the river but the gharial did not retain its hold on his arm. Fortunately the old man's son, Barju Behera seeing the predicament of his father, came to his rescue in a canoe and pulled him by his hair into the boat. As the son dragged his father into the boat the gharial again caught the man by his right thigh and released him immediately. The man was hospitalised and recovered.

Both of us have seen Sankara subsequently and can testify to the extensive scars on the

left forearm and right thigh resulting from lacerations caused by the fish-holding (piercing) teeth of the gharial's elongated jaws.

Information on three other attacks, all in Orissa, reported to us, is set out below:

1. A female gharial was known to be guarding its nest on the river bank at Naraj on Mahanadi river. The attack took place prior to 1974, when a visitor to the riverside village went down to the water's edge after nightfall to take his bath in the river. The local villagers knew and avoided that exact spot where the female gharial was guarding its nest, located in the sandbank near the water's edge. The visitor, unaware of the nest, approached this site and had his ankle 'nipped' by the nest-guarding female. No injury was sustained—probably the gharial was merely trying to warn him away from the nesting site as is known to occur in *C. porosus* (Bustard and Choudhury 1980).

2. Around 1974 a local fisherman, also from Naraj village was bitten in the chest area when he dived under water to release his fishing nets which had become snagged on what he thought to be some rocks. He was immediately released and sustained only minor injuries.

3. A similar incident happened about twentyfive years ago to a fisherman near Talchar on the banks of the River Brahmani,

formerly a good gharial habitat. The man survived the injuries and died only in 1979.

The above incidents, and their rarity, confirm Malcolm Smith's statement, and also indicate how a human death in a crocodilian habitat can be interpreted as being 'only' due to crocodilian attack. Had the son not rescued his father in the instance described

by us, the old man would have drowned as he was unconscious, probably from shock. This would have led to the gharial being blamed for the man's death and perhaps even accused of eating him.

We would be interested to learn of other authenticated instances of gharial attacks on man.

CENTRAL CROCODILE BREEDING &
MANAGEMENT TRAINING INSTITUTE,
RAJENDRANAGAR ROAD,
HYDERABAD 500 264,
April 30, 1981.

H. R. BUSTARD
L. A. K. SINGH

REFERENCES

- BUSTARD, H. R. & CHOUDHURY, B. C. (1980): Parental care in the saltwater crocodile (*Crocodylus porosus* Schneider) and management implications. *J. Bombay nat. Hist. Soc.* 77 (1): 64-69.
- SMITH, M. (1931): The Fauna of British India including Ceylon and Burma. Reptilia and Amphibia. Volume I—Loricata, Testudines. Taylor and Francis, London.

17. A NOTE ON THE SLENDER CORAL SNAKE, *CALLOPHIS MELANURUS*

During the course of snake collection in district Dhar, we obtained specimens of the coral snake *Callophis melanurus*.

Specimens were collected in the early morning during the months of November and December 1980. Collection during morning hours indicates that the snakes are most active during night hours. The collected specimens measured 20 to 30 cm in length and 4 to 5 cm in circumference. This snake is unique in appearance. The head and neck are black in colour having two distinct spots on the top of the head and rest of the body is light pink in colour. The tail has two black rings—one ring at the tail base and other at the tail tip. Poison fangs are well developed. Males are longer than females.

For studying the general biology of the snakes, specimens were kept in large aquaria

with a surface of sand. The animals burrowed into the sand, just keeping their heads above the sand. Excited animals curled their tail up and waved it. A few petridishes were kept filled with water for drinking purpose. Worm snakes *Typhlops braminus* were provided as food. Coral snakes fed on worm snakes.

In Maharashtra it is believed that if this snake bites at night, the victim will die before day break. Hence it is known as "Raath" (= night).

So far this snake has not been reported from Madhya Pradesh. Hence, this report is first from (Dhar) Madhya Pradesh.

Presence of Coral snake, *Callophis melanurus* at Dhar district suggests that these snakes are not only located in the regions mentioned above, but also in the Malwa region of Madhya Pradesh.